



EVERY CHILD

The Child Measurement Programme for Wales 2016/17

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Introduction

This report contains key findings of the Child Measurement Programme for Wales (CMP). The full analysis, including data tables, graphs and maps are presented on the Child Measurement Programme website at: www.publichealthwales.org/childmeasurement

Information about the history of the programme and how information is collected and analysed is also available on the website. The downloadable document “**The Child Measurement Programme for Wales: history, legislative framework and technical aspects**” gives information on measurement of body mass index, prevalence categories used in Wales and how statistical significance is assessed.

This is the 6th year the programme has run, however the first year’s results are no longer included in analysis and discussion, as not all the CMP standards

and guidance were in place when the first year measurements were taken. The programme in Wales relates to measurements of children aged 4 to 5, who are both attending reception class in Wales, and have a residential postcode in Wales.

Summary

The summary results of the programme are shown in Figure 1.

As the programme has been running for six years, it may be possible now to detect trends. Obesity prevalence is statistically significantly higher in 2016/17 than in either of the previous two years. However the difference in obesity prevalence between 2016/17 and 2013/14 is not statistically significant, so no overall trend for the period can be confirmed. There is no statistically significant difference across the years in prevalence of healthy weight or overweight.

Figure 1 – Percentage of children aged 4 to 5 years who are underweight, healthy weight, overweight or obese 2012/13 – 2016/17 in Wales.

	Underweight	Healthy weight	Overweight	Obese
12/13	0.6	73.2	14.9	11.3
13/14	0.8	72.7	14.6	11.8
14/15	0.9	72.9	14.5	11.6
15/16	1.0	72.9	14.5	11.7
16/17	0.8	72.2	14.7	12.4

Produced by Public Health Wales Observatory using CMP data (NWIS)



Results

Healthy weight

72.2% of children measured in Wales are of a healthy weight. The prevalence of healthy weight in girls (72.5%) is higher than in boys (71.9%) but the difference is not statistically significant at national level, nor it is significant at any local level.

Healthy weight or underweight

A very small percentage (0.8%) of children in Wales are categorised as underweight. Because of the risk of identification of individuals where small numbers are involved, the categories of underweight and healthy weight

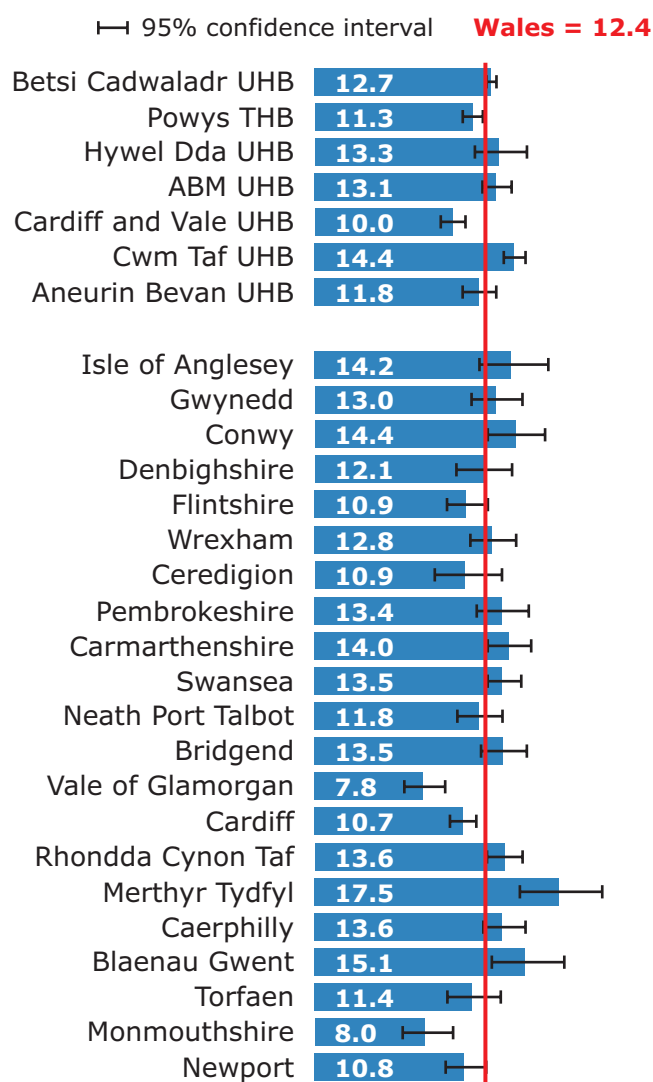
are combined for some of the health boards and local authorities. At national level, 72.9% of children were either a healthy weight or underweight. There is significant variation at a more local level – 83% of children in the Vale of Glamorgan were in this category, while only 67.3% of children measured in Merthyr Tydfil were categorised as healthy weight or underweight.

Obesity

In 2016/17 obesity prevalence in this age group is higher than the Welsh average of 12.4% in two local authorities: Merthyr Tydfil (17.5%) and Blaenau Gwent (15.1%), and the difference is statistically significant. Cardiff (10.7%), the Vale of Glamorgan (7.8%) and Monmouthshire (8.0%) are three local authority areas where obesity prevalence

is statistically significantly lower than the Welsh average. Information on obesity prevalence at a lower level than local authority is available on the Child Measurement Programme website, where it is mapped at Middle Super Output Area (MSOA) level. The average population per MSOA is 7,000 people of all ages.

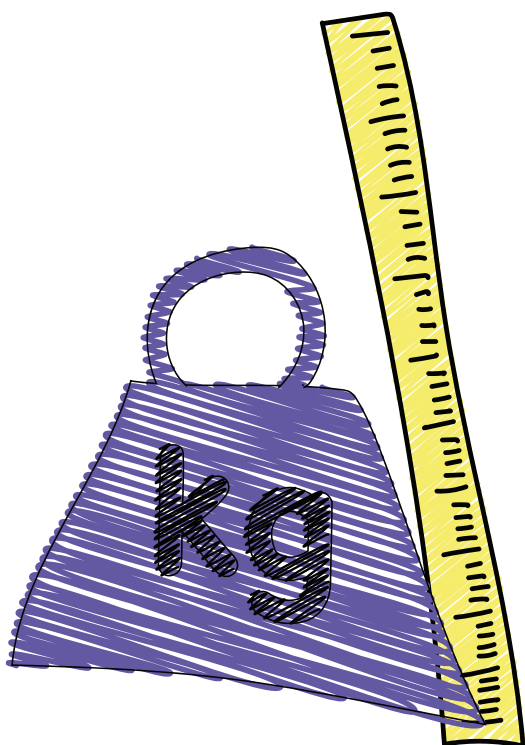
Figure 2 – Percentage of children aged 4 to 5 who are obese, health boards and local authorities, 2016/17



Produced by Public Health Wales Observatory using CMP data (NWIS)

However when obesity prevalence is aggregated for the last five years – 2012/13 to 2016/17, obesity prevalence is statistically significantly higher than the Welsh average of 11.8% (combined for the same years) in seven local authorities:-

- Gwynedd – 12.9%
- Pembrokeshire – 12.8%
- Carmarthenshire – 12.8%
- Rhondda Cynon Taf – 13.3%
- Merthyr Tydfil – 16.6%
- Caerphilly – 12.8%
- Blaenau Gwent – 13.9%

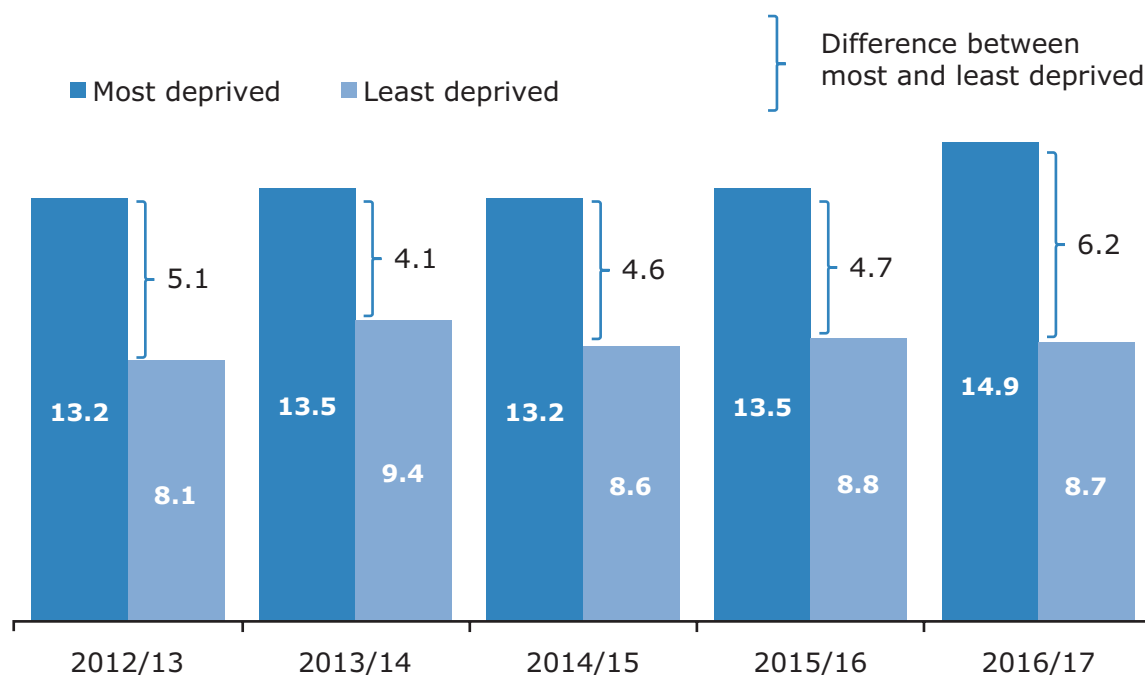


Deprivation

Every year the child measurements are analysed by deprivation. There are 1,909 Lower Super Output Areas (LSOA) in Wales, with a deprivation rank assigned to each LSOA. These scores are then assigned to quintiles (fifths). The children's postcode of residence are assigned to an LSOA. The gap between obesity prevalence in the most and least deprived quintiles is shown in Figure 3. This year the gap between obesity prevalence in the most and least deprived quintiles has increased from 4.7% last year to 6.2% this year. 14.9% of children living in the most deprived quintile are obese, and this is statistically significantly higher than obesity prevalence in any of the other four quintiles.

However it is important to remember that not all individuals living in an area classified as deprived, are themselves living in deprived circumstances. Deprivation is more concentrated in some areas of Wales such as Merthyr Tydfil, but there are pockets throughout the country. In Monmouthshire there are no LSOA areas ranked within the most deprived quintile.

Figure 3 – Percentage of children aged 4 to 5 years who are obese, most and least deprived fifth in Wales, 2016/17



Produced by Public Health Wales Observatory using CMP data (NWIS) and WIMD 2014 (WG)

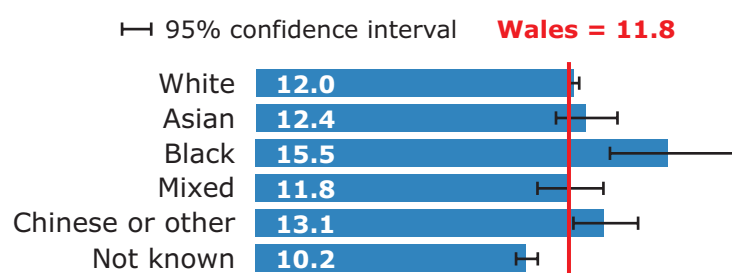
When obesity prevalence amongst children living in the most deprived quintile is aggregated for the five years between 2012/13 and 2016/17, the pattern persists, with 13.7% of children categorised as obese in the most deprived quintile, and 8.7% in the least deprived quintile. Again, the 13.7% figure for the most deprived quintile is statistically significantly higher than any of the other four quintiles.

Ethnicity

The number of children of an ethnic origin other than white is small in Wales. This year only 0.6% of children

measured had their ethnicity recorded as black. Nearly 80% have their ethnicity recorded as white, while for 15% of the children, ethnicity is recorded as not known. Therefore when the analysis of child measurements by ethnicity is undertaken, it may be best to combine the measurements over a number of years, to provide more robust results. This is displayed in Figure 4, and as can be seen, there is significantly higher prevalence of obesity in children whose ethnicity is recorded as black than in children whose ethnicity is recorded as white or not known.

Figure 4 – Percentage of children aged 4 to 5 years who are obese by ethnic group 2012/13 - 2016/17



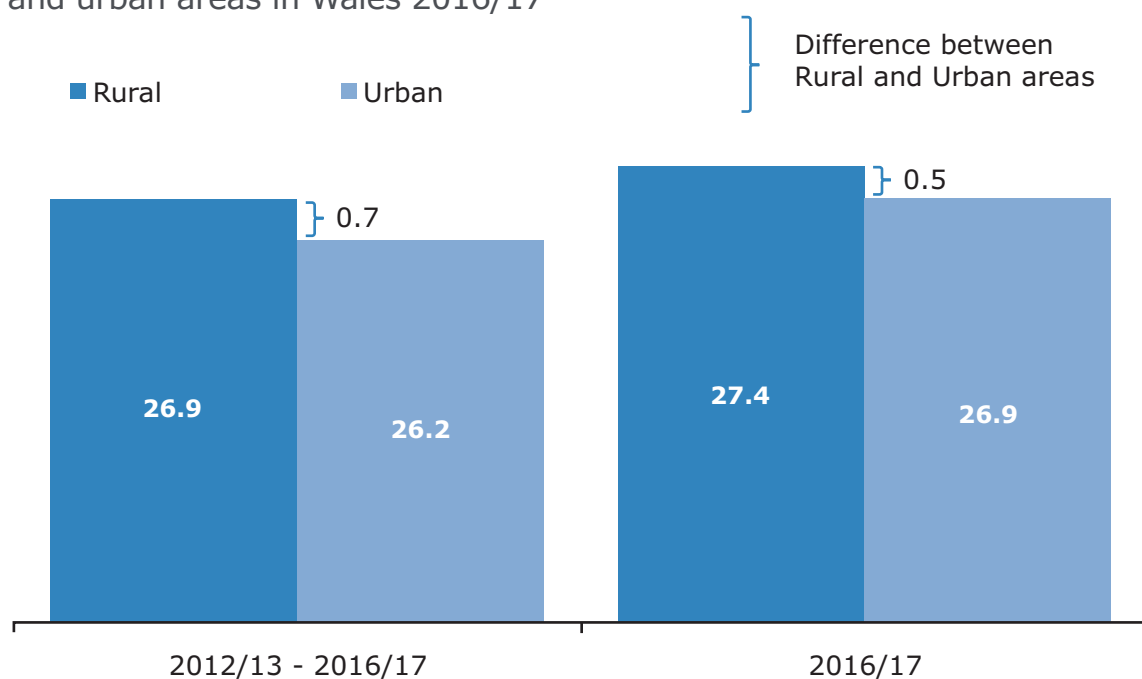
Produced by Public Health Wales Observatory using CMP data (NWIS)

Urban / rural analysis

Three years ago, child measurements were analysed according to whether children were living in urban, rural or very rural areas of the country. At that time it was observed that there was very little difference between prevalence of the weight categories. The analysis was repeated this year, looking across two

categories, urban and rural. Again very little difference was observed (Figure 5). While prevalence of overweight and obesity combined appears slightly higher in rural areas, prevalence of obesity alone appears slightly higher in urban areas. However the differences in both categories are not statistically significant.

Figure 5 – Percentage of children aged 4 to 5 years who are overweight or obese, rural and urban areas in Wales 2016/17



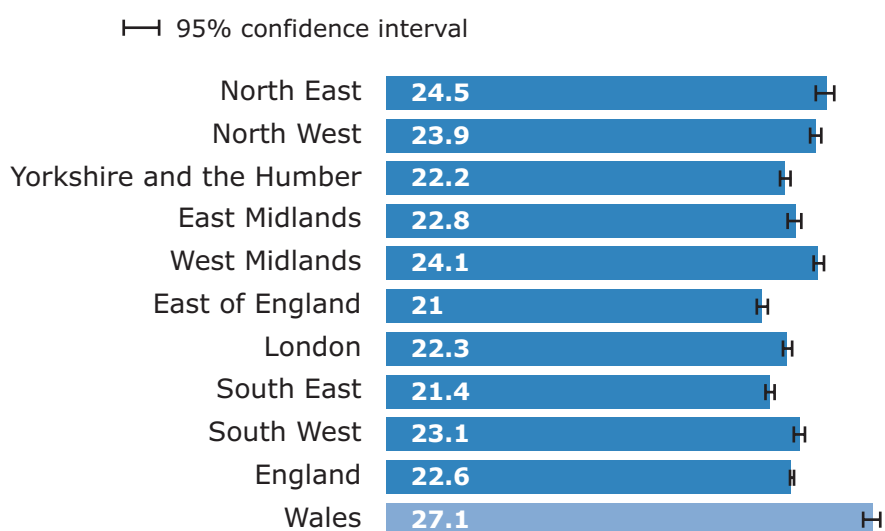
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Comparison

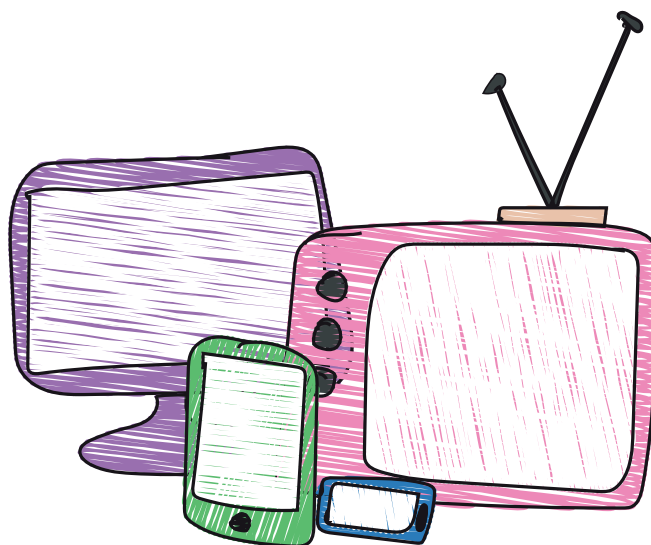
England also has a national child measurement programme (the NCMP), where all children are weighed and measured in reception year. The same growth reference scale (UK90) is used in both England and Wales, so it is possible to draw robust comparisons between

the two countries. Figure 6 shows that prevalence of overweight and obesity is significantly higher in Wales than in England or in any of the English regions. The same is true of obesity prevalence, which at 12.4% in Wales, is statistically significantly higher than the 9.6% figure for England.

Figure 6 – Percentage of children aged 4 to 5 years who are overweight or obese, Wales, England and the English regions, Child Measurement Programme for Wales and the National Child Measurement Programme (England) 2016/17



Produced by Public Health Wales Observatory using CMP data (NWIS) and NCMP data (HSCIC)



Participation

94.1% of children in Wales who were eligible to participate in the programme were measured and their measurements included in the analysis. This is a slight increase on participation last year. 94.6% of girls and 93.7% of boys participated. There is very little variation in participation rates by deprivation quintile.

The Health Board with the highest participation rate was Betsi Cadwaladr University Health Board (UHB) with a participation rate of 96.6%, while the health board with the lowest participation was Powys Teaching Health Board (THB) with a participation rate of 89.2%. Because of the rurality of Powys and distances involved, school health staff may not be able to visit a school a second time to carry out 'catch-up' measurements. By local authority, Wrexham had the highest participation rate at 98.6%, and Merthyr Tydfil had the lowest at 84.0%



Each year a census is taken of all the schools in Wales. In 2016/17, 35,592 children were recorded as attending reception class. There is a small difference (295) between the census figures and the CMP eligibility figures, which might be explained by inclusion of children resident in England but attending schools in Wales in the census; movements in and out of schools; or the timing of the census which is taken on one day in January, while the child measurements are carried out throughout the school year. However when the number included in the measurement programme is compared to the number of children counted in the school census, it appears that coverage of the CMP is very good. 129 children were opted out of the programme by their parents

Table 1 – Participation in the Child Measurement Programme for Wales since 2012/13

	Eligible	Measured	% Participation
2012/13	34,679	29,238	84.3%
2013/14	33,794	30,669	90.8%
2014/15	34,815	32,889	94.5%
2015/16	35,721	33,327	93.3%
2016/17	35,297	33,226	94.1%

Produced by Public Health Wales Observatory using CMP data (NWIS)

More information

This report provides a brief summary of the analysis of the child measurements taken for the Child Measurement Programme. More comprehensive information displayed as charts, tables and maps, can be found on our website at www.publichealthwales.org/childmeasurement

For more information about tackling childhood obesity please go to the Public Health Wales Health Improvement website at:

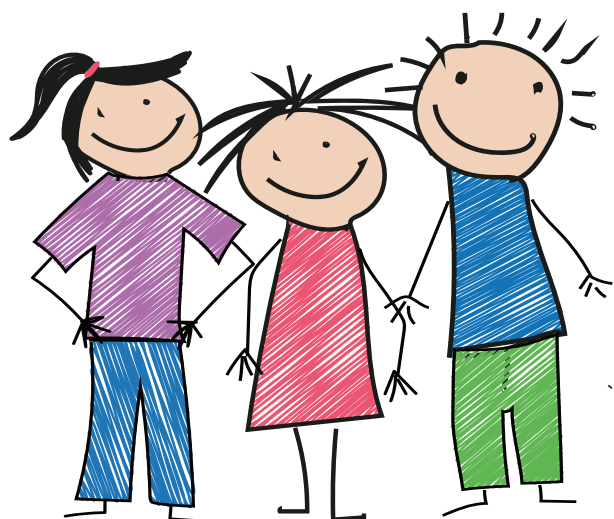
www.everychildwales.co.uk

and follow the link to the

“10 steps to a healthy weight” information.

Abbreviations

BME	Black and minority ethnic
BMI	Body mass index
CMP	Child Measurement Programme for Wales
LSOA	Lower super output area
MSOA	Middle Super output area
NCCHD	National Community Child Health Database
NCMP	National Child Measurement Programme (England)
NHS	National Health Service
NWIS	NHS Wales Informatics Service
THB	Teaching Health Board
UHB	University Health Board
UK90	Growth reference system used in the CMP
WHO	World Health Organisation
WIMD	Welsh index of multiple deprivation



The Child Measurement Programme for Wales
2016/17

www.publichealthwales.org/childmeasurement